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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,344

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Kengo Kurose

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22852

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EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,344	Applicant(s) KUROSE ET AL.	
	Examiner Ariel Balaoing	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-11 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/05/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over OSTROFF et al (US 6,201,968 B1) in view of HORWATH et al (US 2003/0078043 A1).

Regarding claim 1, OSTROFF discloses a mobile communication terminal for use in a cellular mobile communication system (abstract), comprising:

a circuit configured to acquire a first neighbor list from the first base station serving the mobile communication terminal in a standby mode, the first neighbor list

storing data indicating first peripheral base stations existing near the first base station (abstract; col. 3, line 8-col. 4, line 13; monitor list is acquired from current serving site);

a memory configured to store the acquired first neighbor list (**210**; col. 3, lines 53-60);

a circuit configured to acquire, if the serving base station is changed in a standby mode from the first base station to a second base station, a second neighbor list from the second base station, the second neighbor list storing data indicating second peripheral base stations existing near the second base station (**520**; abstract; col. 3, line 8-col. 4, line 13; col. 5, lines 28-63; mobile device switches cells and acquires cell list from second cell);

a circuit configured to additionally store the acquired second neighbor list in the memory (Figure 5; abstract; col. 3, line 8-col. 4, line 13; col. 5, lines 28-63);

a measurement circuit configured to measure, when the mobile communication terminal and the second base station are synchronized with each other, communication quality between the mobile communication terminal and each of the second peripheral base stations listed in the first and second neighbor lists (col. 3, line 8-col. 4, line 13; col. 5, lines 28-63; col. 5, line 50-63; first and second neighbor lists are combined to form a supplemented list comprising first and second neighbor list); and

a circuit configured to select, as a hand-off destination candidate, one of the first peripheral base stations and the second peripheral base stations, which satisfies a preset condition, based on the measured communication quality (col. 3, line 8-col. 4, line 13; col. 5, lines 28-63; col. 5, line 50-63).

However, OSTROFF does not expressly disclose a setting circuit a setting circuit configured to set priority levels for the peripheral base stations listed in the first and second neighbor lists [**supplemented list**] stored in the memory; wherein the measurement circuit is configured to measure communication quality between the mobile terminal and the base stations in the first and second neighbor lists, in a decreasing order of priority level set by the setting circuit. HORWATH discloses a setting circuit configured to set priority levels for the peripheral base stations listed in a neighbor list stored in the memory (paragraph 15); and a measurement circuit configured to measure communication quality between the mobile terminal and base stations in the neighbor list, in a decreasing order of priority level set by the setting circuit (paragraph 15). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OSTROFF to include a prioritized neighbor lists, as taught by HORWATH, since HORWATH states that such a modification would allow a communication system to self adjust to changing conditions.

Regarding claim 2, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. OSTROFF further discloses wherein the memory stores the first neighbor list until a number of occasions in which selection for selecting the hand-off destination candidate is performed reaches a preset value (col. 5, line 64-67; first neighbor list is replaced when conditions are deemed adequate).

Regarding claim 12, OSTROFF discloses a control unit incorporated in a mobile communication terminal for use in a cellular mobile communication system, the mobile communication terminal also incorporating a radio unit configured to transmit and

receive radio signals to and from base stations, the radio unit being connected to the control unit (abstract), the control unit comprising:

- a first reception control section configured to make the radio unit to receive a first neighbor list from the first base station serving the mobile communication terminal in a standby mode, the first neighbor list storing data indicating first peripheral base stations existing near the first base station (abstract; col. 3, line 8-col. 4, line 13; monitor list is acquired from current serving site);

- a memory configured to store the received first neighbor list (**210**; col. 3, lines 53-60);

- a second reception control section configured to make the radio unit to receive, if the serving base station is changed in a standby mode from the first base station to a second base station, a second neighbor list from the second base station, the second neighbor list storing data indicating second peripheral base stations existing near the second base station (**520**; abstract; col. 3, line 8-col. 4, line 13; col. 5, lines 28-63; mobile device switches cells and acquires cell list from second cell);

- a section configured to additionally store the acquired second neighbor list in the memory (Figure 5; abstract; col. 3, line 8-col. 4, line 13; col. 5, lines 28-63);

- a measurement control section configured to measure, when the mobile communication terminal and the second base station are synchronized with each other, communication quality between the mobile communication terminal and each the base stations listed in the first and second neighbor lists (col. 3, line 8-col. 4, line 13; col. 5,

lines 28-63; col. 5, line 50-63; first and second neighbor lists are combined to form a supplemented list comprising first and second neighbor list); and

a selection section configured to select, as a hand-off destination candidate, one of the first peripheral base stations and the second peripheral base stations, which satisfies a preset condition, based on the measured communication quality (col. 3, line 8-col. 4, line 13; col. 5, lines 28-63; col. 5, line 50-63).

However, OSTROFF does not expressly disclose a setting circuit a setting circuit configured to set priority levels for the peripheral base stations listed in the first and second neighbor lists [**supplemented list**] stored in the memory; wherein the measurement control circuit is configured to measure communication quality between the mobile terminal and the base stations in the first and second neighbor lists, in a decreasing order of priority level set by the setting circuit. HORWATH discloses a setting circuit configured to set priority levels for the peripheral base stations listed in a neighbor list stored in the memory (paragraph 15); and a measurement control circuit configured to measure communication quality between the mobile terminal and base stations in the neighbor list, in a decreasing order of priority level set by the setting circuit (paragraph 15). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OSTROFF to include a prioritized neighbor lists, as taught by HORWATH, since HORWATH states that such a modification would allow a communication system to self adjust to changing conditions.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over OSTROFF et al (US 6,201,968 B1) in view of HORWATH et al (US 2003/0078043 A1) and further in view of WALLSTEDT et al (US 5,84,981).

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination OSTROFF and HORWATH does not expressly disclose wherein the memory stores the first neighbor list for a preset time. WALLSTEDT discloses wherein a memory stores a neighbor list for a preset time (col. 15, line 23-col. 16, line 2; col. 18, lines 8-48; memory updates the neighbor list according to a predetermined time). Therefore for it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination OSTROFF and HORWATH to include storage of a neighbor list for a preset time, as taught by WALLSTEDT, as periodic updates to the neighbor list can be used to filter a neighbor list to include sectors with a predetermined quality providing a more efficient monitored list.

6. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over OSTROFF (US 6,188,904 B1) in view of HORWATH (US 2003/0078043 A1) and further in view of SATARASINGHE (US 6,112,089).

Regarding claim 4, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. OSTROFF further discloses wherein the measurement circuit measures reception quality from each of the first and second peripheral base stations (col. 3, line 8-col. 4, line 13; RSSI). However, the combination OSTROFF and HORWATH does not expressly disclose wherein the pilot signal

reception quality is measured. SATARASINGE discloses wherein the pilot signal reception quality is measured (column 2:lines 25-45). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination OSTROFF and HORWATH to measure the pilot signal quality, as taught by SATARASINGE, as measurement of a received pilot channel in order to determine signal interference (signal quality) is well known in the art of hand over.

Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. OSTROFF further discloses wherein the measurement circuit measures the communication quality between the mobile communication terminal and each of the second peripheral base stations listed in the acquired second neighbor list, the measurement circuit also measuring the communication quality between the mobile communication terminal and those of the first peripheral base stations listed in the stored first neighbor list (abstract; col. 3, line 8- col. 4, line 13). However, the combination OSTROFF and HORWATH does not expressly disclose wherein the neighbor list is obtained by excluding the first peripheral base stations doubly listed as the second peripheral base stations in the second neighbor list. SATARASINGE discloses wherein the neighbor list is obtained by excluding the first peripheral base stations doubly listed as the second peripheral base stations in the second neighbor list (Figures 2 and 3; column 3:lines 16-67). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination OSTROFF and HORWATH to exclude doubly listed cells, as this increase processing speed and efficiency of the handover.

Allowable Subject Matter

1. Claims 6-11, and 13 are allowed.
2. The following is an examiner's statement of reasons for allowance: Claims 6-11, and 13 are allowed for the reasons provided in the Office Action mailed March 30, 2006.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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AB


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